



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,948	04/04/2002	Hideo Matsuoka	1098-02	8953

35811 7590 10/26/2005

IP GROUP OF DLA PIPER RUDNICK GRAY CARY US LLP
1650 MARKET ST
SUITE 4900
PHILADELPHIA, PA 19103

EXAMINER

PENG, KUO LIANG

ART UNIT	PAPER NUMBER
----------	--------------

1712

DATE MAILED: 10/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/089,948	Applicant(s) MATSUOKA ET AL.	
	Examiner Kuo-Liang Peng	Art Unit 1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/12/05 Amendment.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17,18 and 20-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17,18 and 20-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 April 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicants' amendment filed on August 12, 2005 was received. Claims 1-16, 19 and 32-40 are deleted. Claim 21 is amended. Now, Claims 17-18 and 20-31 are pending.
2. Claim rejection(s) under 35 USC 103 in the previous Office Action (Paper No. 061105) is/are removed.
3. The indicated allowability of Claims 17-18, 20 and 22-31 is withdrawn in view of the new ground of rejection(s) and the newly discovered reference(s) to Selby (US 4 528 335). The corresponding rejections follow. Examiner apologizes for causing any inconvenience.
4. The text of those sections of Title 35, U.S. code not included in this action can be found in a prior Office Action (Paper No. 061105).

Claim Rejections - 35 USC § 102

5. Claims 17-18 and 20-21 are rejected under 35 U.S.C. 102(b) as being anticipated by JP172 (JP 61-126172).

JP172 discloses a blend comprising nylon 66 and polyphenylene sulfide, wherein the nylon 66 can be in an amount of 40 to 95 wt% based on the combined weight of the nylon 66 and the polyphenylene sulfide. The blend can be used for injection molding. (page 2, lower left column and Examples) Since the relative amounts of the nylon 66 and the polyphenylene sulfide can fall within the range set forth in the instant claims, Examiner has a reasonable basis to believe that JP172's blend inherently has the same properties as those of Applicants', including morphologies. Since PTO does not have proper means to conduct experiments, the burden of proof is now shifted to Applicants to show otherwise. *In re Best*, 195 USPQ 430 (CCPA 1977). An inorganic filler can be used. (page 3, upper left column) Note that Applicants alleged, in a response to the rejection made by another reference that had been withdrawn, that besides the blend ratio, the morphology depends on the melt viscosity ratio of the polymers. (Remarks, page 5, 2nd paragraph in the amendment filed on September 29, 2004) However, it is merely an opinion, not an evidence. The arguments of counsel cannot take the place of evidence in the record. *In re Schulze*, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965); *In re Geisler*, 116 F.3d 1465, 43 USPQ2d 1362 (Fed. Cir. 1997) Especially, the alleged critical limitation of melt viscosity ratio is not cited in the claims in order to be distinguished from the prior art.

6. Claims 17-18 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Akhtar (Polymer Engineering and Science, 32(10) 690-698 (1992)).

Akhtar discloses a thermoplastic resin structure (i.e., dumbbell-shaped specimen)(page 692, left column) derived from a resin composition comprising a PPS and polyamides with various relative amounts of the two components (page 694 and Table 2) Since the relative amounts of the polyphenylene sulfide and the polyamide can fall within the range set forth in the instant claims, Examiner has a reasonable basis to believe that Akhtar's blend inherently has the same properties as those of Applicants', including morphologies. Since PTO does not have proper means to conduct experiments, the burden of proof is now shifted to Applicants to show otherwise. *In re Best*, 195 USPQ 430 (CCPA 1977). Note that Applicants alleged, in a response to the rejection made by another reference that had been withdrawn, that besides the blend ratio, the morphology depends on the melt viscosity ratio of the polymers. (Remarks, page 5, 2nd paragraph in the amendment filed on September 29, 2004) However, it is merely an opinion, not an evidence. The arguments of counsel cannot take the place of evidence in the record. *In re Schulze*, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965); *In re Geisler*, 116 F.3d 1465, 43 USPQ2d 1362 (Fed. Cir. 1997) Especially, the alleged critical

Art Unit: 1712

limitation of melt viscosity ratio is not cited in the claims in order to be distinguished from the prior art.

7. Claims 17-18 and 20-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Selby (US 4 528 335) as evidenced.

Selby discloses a composition comprising a polyphenylene sulfide and a polyamide. (col. 1, lines 34-42, Table 1 and Examples) The relative amounts of the polyphenylene sulfide and the polyamide are exemplified in Examples. An inorganic filler can be used. (col. 3, line 62 to col. 4, line 20) The melt viscosity of the polyphenylene sulfide is described in col. 1, line 64 to col. 2, line 4 and Examples. Selby further teaches the use a polyamide having a degree of polymerization of up to about 500,000. (col. 2, line 50 to col. 3, line 24) Note that the melt viscosity of a polyamide is typically closely related the degree of polymerization thereof. Selby's compositions read on those of Applicants'.

Therefore, Examiner has a reasonable basis to believe that Selby's composition inherently has the same properties as those of Applicants'. Since PTO does not have proper means to conduct experiments, the burden of proof is now shifted to Applicants to show otherwise. *In re Best*, 195 USPQ 430 (CCPA 1977).

Furthermore, note that Applicants alleged, in a response to the rejection made by

another reference that had been withdrawn, that besides the blend ratio, the morphology depends on the melt viscosity ratio of the polymers. (Remarks, page 5, 2nd paragraph in the amendment filed on September 29, 2004) However, it is merely an opinion, not an evidence. The arguments of counsel cannot take the place of evidence in the record. *In re Schulze*, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965); *In re Geisler*, 116 F.3d 1465, 43 USPQ2d 1362 (Fed. Cir. 1997) Especially, the alleged critical limitation of melt viscosity ratio is not cited in the claims in order to be distinguished from the prior art. Selby further teaches the use of the composition for making moldings, containers or attached parts thereof. (col. 4, lines 20-33)

8. Claims 17-18 and 20-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Takagi (JP 05-185425).

Takagi discloses a thermoplastic resin structure formed of a resin composition comprising polyphenylene sulfide (PPS) and polyamide with various relative amounts of the two components. Different morphologies can be obtained by blending the two components in the atmosphere or under reduced pressure. (col. 2, lines 3-22, col. 4, lines 11-13 and Examples). Inorganic filler can be added (col. 2, lines 3-22). Since the relative amounts of the polyphenylene sulfide and the

Art Unit: 1712

polyamide can fall within the range set forth in the instant claims, Examiner has a reasonable basis to believe that Takagi's blend inherently has the same properties as those of Applicants', including morphologies. Since PTO does not have proper means to conduct experiments, the burden of proof is now shifted to Applicants to show otherwise. *In re Best*, 195 USPQ 430 (CCPA 1977). Furthermore, Applicants alleged, in a response to the rejection made by another reference that had been withdrawn, that besides the blend ratio, the morphology depends on the melt viscosity ratio of the polymers. (Remarks, page 5, 2nd paragraph in the amendment filed on September 29, 2004) However, it is merely an opinion, not an evidence. The arguments of counsel cannot take the place of evidence in the record. *In re Schulze*, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965); *In re Geisler*, 116 F.3d 1465, 43 USPQ2d 1362 (Fed. Cir. 1997) Especially, the alleged critical limitation of melt viscosity ratio is not cited in the claims in order to be distinguished from the prior art.

9. Claims 17-18 and 20-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Ono (JP 02-222452).

Ono discloses a molding thermoplastic resin structure formed of a resin composition comprising a polyphenylene sulfide (PPS) and a thermoplastic resin

Art Unit: 1712

such as polyamide with various relative amounts of the two components. (page 3, lower left column to page 3, lower right column, page 4, upper two columns, Table 2 and Examples). The melt viscosity of the PPS is described in page 2, lower left column and Examples. Several commercially available polyamides are used in Examples. Notes that the relative amounts of the polyphenylene sulfide and the polyamide falls within the ranges of the instant claims. Therefore, Examiner has a reasonable basis to believe that Ono's component (A) can possess the same morphologies as those of Applicants. Since PTO does not have proper means to conduct experiments, the burden of proof is now shifted to Applicants to show otherwise. *In re Best*, 195 USPQ 430 (CCPA 1977). Furthermore, Applicants alleged, in a response to the rejection made by another reference that had been withdrawn, that besides the blend ratio, the morphology depends on the melt viscosity ratio of the polymers. (Remarks, page 5, 2nd paragraph in the amendment filed on September 29, 2004) However, it is merely an opinion, not an evidence. The arguments of counsel cannot take the place of evidence in the record. *In re Schulze*, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965); *In re Geisler*, 116 F.3d 1465, 43 USPQ2d 1362 (Fed. Cir. 1997) Especially, the alleged critical limitation of melt viscosity ratio is not cited in the claims in order to be

Art Unit: 1712

distinguished from the prior art. Inorganic fillers can be added (page 4, upper right column).

10. Claims 17-18 and 20-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Deguchi (JP 03-215556).

Deguchi discloses a molding thermoplastic resin structure formed of a resin composition comprising a polyamide, a polyarylene sulfide and a layered silicate with various relative amounts of the two components. There is phase separation between the polyamide and the polyarylene sulfide. (page 2, lower left column, page 3, upper left column and lower right column, page 5, upper left column and Examples). The relative amounts of the polyarylene sulfide and the polyamide are described in page 3, upper left column. The melt viscosity of the polyarylene sulfide is described in page 3, lower left column. The molecular weight of the polyamide is described in page 3, upper right column. An inorganic filler can be used. (page 3, upper left column) Note that the melt viscosity of a polyamide is typically closely related the degree of polymerization thereof. Deguchi's compositions read on those of Applicants'. Therefore, Examiner has a reasonable basis to believe that Deguchi's composition inherently has the same properties as those of Applicants'. Since PTO does not have proper means to conduct

experiments, the burden of proof is now shifted to Applicants to show otherwise.

In re Best, 195 USPQ 430 (CCPA 1977). Furthermore, note that Applicants alleged, in a response to the rejection made by another reference that had been withdrawn, that besides the blend ratio, the morphology depends on the melt viscosity ratio of the polymers. (Remarks, page 5, 2nd paragraph in the amendment filed on September 29, 2004) However, it is merely an opinion, not an evidence. The arguments of counsel cannot take the place of evidence in the record. *In re Schulze*, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965); *In re Geisler*, 116 F.3d 1465, 43 USPQ2d 1362 (Fed. Cir. 1997) Especially, the alleged critical limitation of melt viscosity ratio is not cited in the claims in order to be distinguished from the prior art. Selby further teaches the use of the composition for making moldings, containers or attached parts thereof. (col. 4, lines 20-33)

Claim Rejections - 35 USC § 103

11. Claims 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP172 in view of Kazuhiko (JP 05-124090).

JP172 discloses a blend comprising nylon 66 and polyphenylene sulfide, supra, which is incorporated herein by reference. JP172 also teaches the use of the blend for molding materials. (page 2, lower left column) Furthermore, it is well

Art Unit: 1712

known that the blend is an excellent molding material for preparing containers, etc. For example, Kazuhiko teaches the use of a PPS/polyamide blend for making tanks, bottles, etc. ([0008]-[0009] and [0078]) Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize JP172's resin composition for making containers. Furthermore, since JP172's composition can be used for making containers, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize the same material for any attached part for the container. The motivation is to prepare containers with attached parts possessing the same characteristics as the containers so that the containers and the attached parts as a whole can withstand whatever environment they are subjected to.

12. Claims 25-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP172 in view of Tateyama (US 6 485 806).

JP172 discloses a blend comprising nylon 66 and polyphenylene sulfide, supra, which is incorporated herein by reference. JP172 also teaches the use of the blend for molding materials. (page 2, lower left column) Furthermore, it is well known that the blend is an excellent molding material for preparing a multilayered articles. For example, Tateyama discloses a multilayered molding article such as

Art Unit: 1712

containers, tubes, pipes, etc, etc. utilizing as a material for one of the layers a blend of PPS and polyamide. The polyamide can be Nylon 6, Nylon 66, etc. (col. 2, lines 15-26, and col. 5, line 59 to col. 6, line 9) Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize JP172's resin composition in a multilayered container. Furthermore, since Akhtar's composition can be used for making multilayered containers, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize the same material for any attached part for the container. The motivation is to prepare multilayered containers with attached parts possessing the same characteristics as the containers so that the multilayered containers and the attached parts as a whole can withstand whatever environment they are subjected to. Note that there is a neighboring thermoplastic layer on Tateyama's PPS/polyamide layer. (col. 2, lines 15-26) This neighboring thermoplastic layer can be the same material as the thermoplastic resin (A3), i.e., polyolefins, polyamides, polyesters, etc. (col. 2, lines 15-26 and col. 5, lines 59-65) The multilayered article can be formed by co-extrusion. (Tateyama, col. 10, lines 17-27)

13. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Akhtar in view of Kashiwadata (US 5 436 300)

Akhtar discloses a thermoplastic resin structure, supra, which is incorporated herein by reference. Akhtar is silent on the use of an inorganic filler. However, it is a common practice to add an inorganic filler to further enhance the mechanical properties of the blend besides optimizing the morphologies. Furthermore, Kashiwadata discloses a polyarylene sulfide/polyamide blend comprising up to 60%wt of an inorganic filler. The motivation of adding the inorganic filler is to afford a composition with improved mechanical strength. (Abstract, col. 1, line 59 to col. 2, lines 46 and col. 6, line 37 to col. 9, line 6) Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate an inorganic filler into Akhtar's composition.

14. Claims 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akhtar in view of Kazuhiko (JP 05-124090).

Akhtar discloses a thermoplastic resin structure, supra, which is incorporated herein by reference. Akhtar further teaches that the blend possess the characteristics of good moldability, superior mechanical properties, etc. (page 690) Furthermore, it is well known that the blend is an excellent molding material for preparing containers, etc. For example, Kazuhiko teaches the use of a PPS/polyamide blend for making tanks, bottles, etc. ([0008]-[0009] and [0078])

Art Unit: 1712

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize Akhtar's resin composition for making containers. Furthermore, since Akhtar's composition can be used for making containers, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize the same material for any attached part for the container. The motivation is to prepare containers with attached parts possessing the same characteristics as the containers so that the containers and the attached parts as a whole can withstand whatever environment they are subjected to.

15. Claims 25-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akhtar in view of Tateyama (US 6 485 806).

Akhtar discloses a thermoplastic resin structure, *supra*, which is incorporated herein by reference. Akhtar further teaches that the blend possess the characteristics of good moldability, superior mechanical properties, etc. (page 690) Furthermore, it is well known that the blend is an excellent molding material for preparing a multilayered articles. For example, Tateyama discloses a multilayered molding article such as containers, tubes, pipes, etc, etc. utilizing as a material for one of the layers a blend of PPS and polyamide. The polyamide can be Nylon 6, Nylon 66, etc. (col. 2, lines 15-26, and col. 5, line 59 to col. 6, line 9) Therefore, it

Art Unit: 1712

would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize Akhtar's resin composition in a multilayered container. Furthermore, since Akhtar's composition can be used for making multilayered containers, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize the same material for any attached part for the container. The motivation is to prepare multilayered containers with attached parts possessing the same characteristics as the containers so that the multilayered containers and the attached parts as a whole can withstand whatever environment they are subjected to. Note that there is a neighboring thermoplastic layer on Tateyama's PPS/polyamide layer. (col. 2, lines 15-26) This neighboring thermoplastic layer can be the same material as the thermoplastic resin (A3), i.e., polyolefins, polyamides, polyesters, etc. (col. 2, lines 15-26 and col. 5, lines 59-65) The multilayered article can be formed by co-extrusion. (Tateyama, col. 10, lines 17-27)

16. Claims 25-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Selby in view of Tateyama (US 6 485 806).

Selby discloses a molding composition comprising a polyphenylene sulfide and a polyamide, *supra*, which is incorporated herein by reference. Furthermore, it

Art Unit: 1712

is well known that the blend is an excellent molding material for preparing a multilayered articles. For example, Tateyama discloses a multilayered molding article such as containers, tubes, pipes, etc, etc. utilizing as a material for one of the layers a blend of PPS and polyamide. The polyamide can be Nylon 6, Nylon 66, etc. (col. 2, lines 15-26, and col. 5, line 59 to col. 6, line 9) Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize Selby's resin composition in a multilayered container. Furthermore, since Selby's composition can be used for making multilayered containers, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize the same material for any attached part for the container. The motivation is to prepare multilayered containers with attached parts possessing the same characteristics as the containers so that the multilayered containers and the attached parts as a whole can withstand whatever environment they are subjected to. Note that there is a neighboring thermoplastic layer on Tateyama's PPS/polyamide layer. (col. 2, lines 15-26) This neighboring thermoplastic layer can be the same material as the thermoplastic resin (A3), i.e., polyolefins, polyamides, polyesters, etc. (col. 2, lines 15-26 and col. 5, lines 59-65) The multilayered article can be formed by co-extrusion. (Tateyama, col. 10, lines 17-27)

17. Claims 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takagi in view of Kazuhiko (JP 05-124090).

Takagi discloses a thermoplastic resin structure formed of a resin composition comprising polyphenylene sulfide (PPS) and polyamide, supra, which is incorporated herein by reference. Furthermore, it is well known that the blend is an excellent molding material for preparing containers, etc. For example, Kazuhiko teaches the use of a PPS/polyamide blend for making tanks, bottles, etc. ([0008]-[0009] and [0078]) Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize Akhtar's resin composition for making containers. Furthermore, since Takagi's composition can be used for making containers, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize the same material for any attached part for the container. The motivation is to prepare containers with attached parts possessing the same characteristics as the containers so that the containers and the attached parts as a whole can withstand whatever environment they are subjected to.

Art Unit: 1712

18. Claims 25-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takagi in view of Tateyama (US 6 485 806).

Takagi discloses a thermoplastic resin structure formed of a resin composition comprising polyphenylene sulfide (PPS) and polyamide, supra, which is incorporated herein by reference. Furthermore, it is well known that the blend is an excellent molding material for preparing a multilayered articles. For example, Tateyama discloses a multilayered molding article such as containers, tubes, pipes, etc, etc. utilizing as a material for one of the layers a blend of PPS and polyamide. The polyamide can be Nylon 6, Nylon 66, etc. (col. 2, lines 15-26, and col. 5, line 59 to col. 6, line 9) Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize Takagi's resin composition in a multilayered container. Furthermore, since Takagi's composition can be used for making multilayered containers, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize the same material for any attached part for the container. The motivation is to prepare multilayered containers with attached parts possessing the same characteristics as the containers so that the multilayered containers and the attached parts as a whole can withstand whatever environment they are subjected to. Note that there is a neighboring thermoplastic layer on Tateyama's PPS/polyamide layer. (col. 2, lines

Art Unit: 1712

15-26) This neighboring thermoplastic layer can be the same material as the thermoplastic resin (A3), i.e., polyolefins, polyamides, polyesters, etc. (col. 2, lines 15-26 and col. 5, lines 59-65) The multilayered article can be formed by co-extrusion. (Tateyama, col. 10, lines 17-27)

19. Claims 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ono in view of Kazuhiko (JP 05-124090).

Ono discloses a molding thermoplastic resin structure formed of a resin composition comprising a polyphenylene sulfide (PPS) and a thermoplastic resin such as polyamide, supra, which is incorporated herein by reference. Furthermore, it is well known that the blend is an excellent molding material for preparing containers, etc. For example, Kazuhiko teaches the use of a PPS/polyamide blend for making tanks, bottles, etc. ([0008]-[0009] and [0078]) Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize Ono's resin composition for making containers. Furthermore, since Ono's composition can be used for making containers, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize the same material for any attached part for the container. The motivation is to

Art Unit: 1712

prepare containers with attached parts possessing the same characteristics as the containers so that the containers and the attached parts as a whole can withstand whatever environment they are subjected to.

20. Claims 25-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ono in view of Tateyama (US 6 485 806).

Ono discloses a molding thermoplastic resin structure formed of a resin composition comprising a polyphenylene sulfide (PPS) and a thermoplastic resin such as polyamide, supra, which is incorporated herein by reference. Furthermore, it is well known that the blend is an excellent molding material for preparing a multilayered articles. For example, Tateyama discloses a multilayered molding article such as containers, tubes, pipes, etc, etc. utilizing as a material for one of the layers a blend of PPS and polyamide. The polyamide can be Nylon 6, Nylon 66, etc. (col. 2, lines 15-26, and col. 5, line 59 to col. 6, line 9) Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize Ono's resin composition in a multilayered container.

Furthermore, since Ono's composition can be used for making multilayered containers, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize the same material for any attached part for the

Art Unit: 1712

container. The motivation is to prepare multilayered containers with attached parts possessing the same characteristics as the containers so that the multilayered containers and the attached parts as a whole can withstand whatever environment they are subjected to. Note that there is a neighboring thermoplastic layer on Tateyama's PPS/polyamide layer. (col. 2, lines 15-26) This neighboring thermoplastic layer can be the same material as the thermoplastic resin (A3), i.e., polyolefins, polyamides, polyesters, etc. (col. 2, lines 15-26 and col. 5, lines 59-65) The multilayered article can be formed by co-extrusion. (Tateyama, col. 10, lines 17-27)

21. Claims 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deguchi in view of Kazuhiko (JP 05-124090).

Deguchi discloses a molding thermoplastic resin structure formed of a resin composition comprising a polyamide, a polyarylene sulfide, supra, which is incorporated herein by reference. Furthermore, it is well known that the blend is an excellent molding material for preparing containers, etc. For example, Kazuhiko teaches the use of a PPS/polyamide blend for making tanks, bottles, etc. ([0008]-[0009] and [0078]) Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize JP172's resin composition

Art Unit: 1712

for making containers. Furthermore, since Deguchi's composition can be used for making containers, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize the same material for any attached part for the container. The motivation is to prepare containers with attached parts possessing the same characteristics as the containers so that the containers and the attached parts as a whole can withstand whatever environment they are subjected to.

22. Claims 25-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deguchi in view of Tateyama (US 6 485 806).

Deguchi discloses a molding thermoplastic resin structure formed of a resin composition comprising a polyamide, a polyarylene sulfide, *supra*, which is incorporated herein by reference. Furthermore, it is well known that the blend is an excellent molding material for preparing a multilayered articles. For example, Tateyama discloses a multilayered molding article such as containers, tubes, pipes, etc, etc. utilizing as a material for one of the layers a blend of PPS and polyamide. The polyamide can be Nylon 6, Nylon 66, etc. (col. 2, lines 15-26, and col. 5, line 59 to col. 6, line 9) Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize Deguchi's resin

Art Unit: 1712

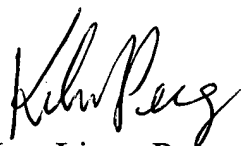
composition in a multilayered container. Furthermore, since Deguchi's composition can be used for making multilayered containers, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize the same material for any attached part for the container. The motivation is to prepare multilayered containers with attached parts possessing the same characteristics as the containers so that the multilayered containers and the attached parts as a whole can withstand whatever environment they are subjected to. Note that there is a neighboring thermoplastic layer on Tateyama's PPS/polyamide layer. (col. 2, lines 15-26) This neighboring thermoplastic layer can be the same material as the thermoplastic resin (A3), i.e., polyolefins, polyamides, polyesters, etc. (col. 2, lines 15-26 and col. 5, lines 59-65) The multilayered article can be formed by co-extrusion. (Tateyama, col. 10, lines 17-27)

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuo-Liang Peng whose telephone number is (571) 272-1091. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski, can be reached on (571) 272-1302. The fax phone number for the organization where this application

Art Unit: 1712

or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

klp
October 24, 2005


Kuo-Liang Peng
Primary Examiner
Art Unit 1712